

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 17, 2004, 19:32:29 ; Search time 45 seconds

(without alignments)
4570.880 Million cell updates/sec

Title: US-10-018-418-4

Perfect score: 4276
Sequence: 1 MSBVAASAFALASAPQ.....SWEHAKYEDVILKRYQW 799

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 1045404 seqs, 257433775 residues

Total number of hits satisfying chosen parameters: 1045404

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: Published Applications AA:

1: /cgn2_6/prodata/1/pubppa/US07_PUBCOMB.pep:*
2: /cgn2_6/prodata/1/pubppa/PCT_NEW_PUB.pep:*
3: /cgn2_6/prodata/1/pubppa/US06_NEW_PUB.pep:*
4: /cgn2_6/prodata/1/pubppa/US06_PUBCOMB.pep:*
5: /cgn2_6/prodata/1/pubppa/US07_NEW_PUB.pep:*
6: /cgn2_6/prodata/1/pubppa/PCTUS_PUBCOMB.pep:*
7: /cgn2_6/prodata/1/pubppa/US08_NEW_PUB.pep:*
8: /cgn2_6/prodata/1/pubppa/US08_PUBCOMB.pep:*
9: /cgn2_6/prodata/1/pubppa/US09_PUBCOMB.pep:*
10: /cgn2_6/prodata/1/pubppa/US09_PUBCOMB.pep:*
11: /cgn2_6/prodata/1/pubppa/US09_NEW_PUB.pep:*
12: /cgn2_6/prodata/1/pubppa/US10_PUBCOMB.pep:*
13: /cgn2_6/prodata/1/pubppa/US10_PUBCOMB.pep:*
14: /cgn2_6/prodata/1/pubppa/US10_PUBCOMB.pep:*
15: /cgn2_6/prodata/1/pubppa/US10_PUBCOMB.pep:*
16: /cgn2_6/prodata/1/pubppa/US10_NEW_PUB.pep:*
17: /cgn2_6/prodata/1/pubppa/US60_NEW_PUB.pep:*
18: /cgn2_6/prodata/1/pubppa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	4075	95.3	799	9	US-09-952-677-6
2	2516.5	58.9	641	14	US-10-272-291-8
3	2380.5	55.7	694	16	US-10-389-566-797
4	2365.5	55.3	694	16	US-10-389-566-1213
5	2163	50.6	801	14	US-10-044-543-26
6	2161.5	50.5	535	12	US-10-425-114-43176
7	2161.5	50.5	771	12	US-10-424-599-202586
8	2150.5	50.3	767	14	US-10-284-668-8
9	2069.5	48.4	477	14	US-10-272-291-7
10	2063	48.2	690	14	US-10-044-543-6
11	2059	48.2	558	14	US-10-284-668-6
12	1933	45.2	440	12	US-10-425-114-38552
13	1374	32.1	341	12	US-10-425-114-58577
14	1176	27.5	641	14	US-10-284-668-10
15	1138.5	26.6	671	9	US-09-952-677-2

16	1128	26.4	490	12	US-10-425-114-53653	Sequence 53653, A
17	1004.5	23.5	459	14 <td>US-10-284-668-4<td>Sequence 4, Appl1</td></td>	US-10-284-668-4 <td>Sequence 4, Appl1</td>	Sequence 4, Appl1
18	950	22.2	619	12 <td>US-10-424-599-207776<td>Sequence 207776, A</td></td>	US-10-424-599-207776 <td>Sequence 207776, A</td>	Sequence 207776, A
19	950	22.2	636	14 <td>US-10-136-075-4<td>Sequence 4, Appl1</td></td>	US-10-136-075-4 <td>Sequence 4, Appl1</td>	Sequence 4, Appl1
20	907	21.2	616	14 <td>US-10-044-543-14<td>Sequence 14, Appl1</td></td>	US-10-044-543-14 <td>Sequence 14, Appl1</td>	Sequence 14, Appl1
21	891.5	20.8	599	14 <td>US-10-136-075-5<td>Sequence 5, Appl1</td></td>	US-10-136-075-5 <td>Sequence 5, Appl1</td>	Sequence 5, Appl1
22	885	20.3	615	14 <td>US-10-044-543-2<td>Sequence 2, Appl1</td></td>	US-10-044-543-2 <td>Sequence 2, Appl1</td>	Sequence 2, Appl1
23	869	20.3	600	14 <td>US-10-272-291-3<td>Sequence 3, Appl1</td></td>	US-10-272-291-3 <td>Sequence 3, Appl1</td>	Sequence 3, Appl1
24	869	20.3	605	14 <td>US-10-272-291-6<td>Sequence 6, Appl1</td></td>	US-10-272-291-6 <td>Sequence 6, Appl1</td>	Sequence 6, Appl1
25	869	20.3	606	14 <td>US-10-228-063-8<td>Sequence 8, Appl1</td></td>	US-10-228-063-8 <td>Sequence 8, Appl1</td>	Sequence 8, Appl1
26	868	20.3	269	12 <td>US-10-425-114-51909<td>Sequence 51909, A</td></td>	US-10-425-114-51909 <td>Sequence 51909, A</td>	Sequence 51909, A
27	867	20.3	600	14 <td>US-10-044-543-22<td>Sequence 22, Appl1</td></td>	US-10-044-543-22 <td>Sequence 22, Appl1</td>	Sequence 22, Appl1
28	865	20.2	609	14 <td>US-10-136-075-2<td>Sequence 2, Appl1</td></td>	US-10-136-075-2 <td>Sequence 2, Appl1</td>	Sequence 2, Appl1
29	863	20.2	600	14 <td>US-10-272-291-4<td>Sequence 4, Appl1</td></td>	US-10-272-291-4 <td>Sequence 4, Appl1</td>	Sequence 4, Appl1
30	862	20.2	609	12 <td>US-10-425-114-52803<td>Sequence 52803, A</td></td>	US-10-425-114-52803 <td>Sequence 52803, A</td>	Sequence 52803, A
31	844	19.7	361	12 <td>US-10-424-559-216147<td>Sequence 216147, A</td></td>	US-10-424-559-216147 <td>Sequence 216147, A</td>	Sequence 216147, A
32	841	19.7	614	14 <td>US-10-044-543-18<td>Sequence 18, Appl1</td></td>	US-10-044-543-18 <td>Sequence 18, Appl1</td>	Sequence 18, Appl1
33	781.5	18.3	237	12 <td>US-10-425-114-39536<td>Sequence 39536, A</td></td>	US-10-425-114-39536 <td>Sequence 39536, A</td>	Sequence 39536, A
34	781.5	18.3	303	12 <td>US-10-425-114-59569<td>Sequence 69569, A</td></td>	US-10-425-114-59569 <td>Sequence 69569, A</td>	Sequence 69569, A
35	770	18.0	466	15 <td>US-10-369-493-2979<td>Sequence 2979, Ap</td></td>	US-10-369-493-2979 <td>Sequence 2979, Ap</td>	Sequence 2979, Ap
36	758	17.7	461	15 <td>US-10-369-493-20916<td>Sequence 20916, A</td></td>	US-10-369-493-20916 <td>Sequence 20916, A</td>	Sequence 20916, A
37	718.5	16.8	483	15 <td>US-10-369-493-4757<td>Sequence 4757, Ap</td></td>	US-10-369-493-4757 <td>Sequence 4757, Ap</td>	Sequence 4757, Ap
38	718.5	16.8	483	15 <td>US-10-369-493-7516<td>Sequence 7516, Ap</td></td>	US-10-369-493-7516 <td>Sequence 7516, Ap</td>	Sequence 7516, Ap
39	717	16.8	483	15 <td>US-10-369-493-18358<td>Sequence 18358, A</td></td>	US-10-369-493-18358 <td>Sequence 18358, A</td>	Sequence 18358, A
40	713.5	16.7	484	15 <td>US-10-369-493-23266<td>Sequence 23266, A</td></td>	US-10-369-493-23266 <td>Sequence 23266, A</td>	Sequence 23266, A
41	712	16.7	476	15 <td>US-10-369-493-16676<td>Sequence 16676, A</td></td>	US-10-369-493-16676 <td>Sequence 16676, A</td>	Sequence 16676, A
42	691.5	16.2	466	15 <td>US-10-369-493-9895<td>Sequence 9895, Ap</td></td>	US-10-369-493-9895 <td>Sequence 9895, Ap</td>	Sequence 9895, Ap
43	690	16.1	174	12 <td>US-10-424-559-202582<td>Sequence 202582, A</td></td>	US-10-424-559-202582 <td>Sequence 202582, A</td>	Sequence 202582, A
44	686.5	16.1	465	15 <td>US-10-369-493-19030<td>Sequence 19030, A</td></td>	US-10-369-493-19030 <td>Sequence 19030, A</td>	Sequence 19030, A
45	686	16.0	459	15 <td>US-10-369-493-19180<td>Sequence 19180, A</td></td>	US-10-369-493-19180 <td>Sequence 19180, A</td>	Sequence 19180, A

ALIGNMENTS

RESULT 1
US-09-952-677-6
Sequence 6, Application US/09952677
Patent No. US20020138876A1
GENERAL INFORMATION:

APPLICANT: Block, Martina

Lott, Horst

Luticke, Stephanie

Walter, Lennart

Frohberg, Claus

Kosemann, Jens

TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING ENZYMES

FROM WHEAT WHICH ARE INVOLVED IN STARCH

SYNTHESIS

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: James F. Haley, Jr., c/o Fish & Neave

STREET: 1251 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: United States of America

ZIP: 10020

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30 (EPO)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/952,677

FILING DATE: 14-Sep-2001

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/196,390

FILING DATE: 19-No. US20020138876A1-1998

APPLICATION NUMBER: DE 196 21 588.9

FILING DATE: 29-MAY-1996

APPLICATION NUMBER: DE 196 36 917.7

FILING DATE: 11-SEP-1996

APPLICATION NUMBER: PCT/EP97/02793

Mon Mar 22 09:26:54 2004

us-10-018-418-4.rapb

Page 2

FILING DATE: 28-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Haley, Jr., James F.
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: AGREVO-9
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 596-9000
TELEFAX: (212) 596-9090
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 799 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-09-952-677-6

Query Match 95.3%; Score 4075; DB 9; Length 799;
Best Local Similarity 95.6%; Pred. No. 3,2e-312;
Matches 764; Conservative 7; Mismatches 28; Indels 0; Gaps 0;

1 MSSAVASASFLALASAPGSRPRARASAPPPAGAGRLWPPPPORTARADGVAAAR 60
1 MSSAVASASFLALASAPGSRPRARASAPPPAGAGRLWPPPPORTARADGVAAAR 60
61 ACKKARVDDDAASAROPRARGAATYVAERDPVKTLDRAEGGAPAPAPRODAAR 120
61 ACKKARVDDDAASAROPRARGAATYVAERDPVKTLDRAEGGAPAPAPRODAAR 120
121 PPSNMGTPVNGNKSTGGGATKDSGLPAPARAPHPSTONRVPVNGENKXNVASPPSIA 180
121 PPSNMGTPVNGNKSTGGGATKDSGLPAPARAPHPSTONRVPVNGENKXNVASPPSIA 180
121 PPSNMGTPVNGNKSTGGGATKDSGLPAPARAPHPSTONRVPVNGENKXNVASPPSIA 180
181 EVVADSAATISISDKAPEVVPAPKPPSSGSGNFVVSASAPRLDIDVPELKCAVY 240
181 EVVADSAATISISDKAPEVVPAPKPPSSGSGNFVVSASAPRLDIDVPELKCAVY 240
181 EVVADSAATISISDKAPEVVPAPKPPSSGSGNFVVSASAPRLDIDVPELKCAVY 240
241 VEAAPKALSPAPPAVQEDLMDFKYIGFEEPEAKDGMAYADAGSFHHNNDG 300
241 VEAAPKALSPAPPAVQEDLMDFKYIGFEEPEAKDGMAYADAGSFHHNNDG 300
241 VEAAPKALSPAPPAVQEDLMDFKYIGFEEPEAKDGMAYADAGSFHHNNDG 300
301 PLAGENMNVVVAABCSBCKTGLGVAGALPKALAKRGHVMVVPYGYEAYDY 360
301 PLAGENMNVVVAABCSBCKTGLGVAGALPKALAKRGHVMVVPYGYEAYDY 360
301 PLAGENMNVVVAABCSBCKTGLGVAGALPKALAKRGHVMVVPYGYEAYDY 360
361 GVRKYKKAAGDMENYFHAVIDGVDFIDAPLFRHQEDIYGSROEIMKMLIFCKA 420
361 GVRKYKKAAGDMENYFHAVIDGVDFIDAPLFRHQEDIYGSROEIMKMLIFCKA 420
361 GVRKYKKAAGDMENYFHAVIDGVDFIDAPLFRHQEDIYGSROEIMKMLIFCKA 420
421 AVEVPMHVPCCGVPRYDGNLVFIANDMTALLPYLKAAYRDHGMQYTESIMVTHIAH 480
421 AVEVPMHVPCCGVPRYDGNLVFIANDMTALLPYLKAAYRDHGMQYTESIMVTHIAH 480
421 AVEVPMHVPCCGVPRYDGNLVFIANDMTALLPYLKAAYRDHGMQYTESIMVTHIAH 480
481 OGRGPDPEPTELEHEHLEHRLYDPVGEHANYFAAGLKMADQVVPVPGYLMELXTV 540
481 OGRGPDPEPTELEHEHLEHRLYDPVGEHANYFAAGLKMADQVVPVPGYLMELXTV 540
481 OGRGPDPEPTELEHEHLEHRLYDPVGEHANYFAAGLKMADQVVPVPGYLMELXTV 540
541 EGWGMGLHDIIRONDMKTRGIYNGIDNMENPEVDVHLKSDGYTFPSIGTLDGGRQCKEA 600
541 EGWGMGLHDIIRONDMKTRGIYNGIDNMENPEVDVHLKSDGYTFPSIGTLDGGRQCKEA 600
541 EGWGMGLHDIIRONDMKTRGIYNGIDNMENPEVDVHLKSDGYTFPSIGTLDGGRQCKEA 600
601 LORELGLQVRADVPLLGFIQRLDQKQVEIADAMPWISQDVOLVNLGTRHDLBSMLR 660
601 LORELGLQVRADVPLLGFIQRLDQKQVEIADAMPWISQDVOLVNLGTRHDLBSMLR 660
601 LORELGLQVRADVPLLGFIQRLDQKQVEIADAMPWISQDVOLVNLGTRHDLBSMLR 660
661 HEEHEDHDKRWGSGSVRLARITAGADALLMPSRFPCCGLNLYMAGTVPVYHAYG 720
661 HEEHEDHDKRWGSGSVRLARITAGADALLMPSRFPCCGLNLYMAGTVPVYHAYG 720
661 HEEHEDHDKRWGSGSVRLARITAGADALLMPSRFPCCGLNLYMAGTVPVYHAYG 720
721 GVRDTPFPDPFNHSLGWTFDRAEAKHLEALGHCLRTYRDYESWRGLQERMSQDS 780
721 GVRDTPFPDPFNHSLGWTFDRAEAKHLEALGHCLRTYRDYESWRGLQERMSQDS 780
721 GVRDTPFPDPFNHSLGWTFDRAEAKHLEALGHCLRTYRDYESWRGLQERMSQDS 780

781 WEHAAKLYEDVLKAYQW 799
781 WEHAAKLYEDVLKAYQW 799

RESULT 2

US-10-272-291-8
Sequence 8, Application US/10272291
Publication No. US20030150023A1
GENERAL INFORMATION:
APPLICANT: Exseed Genetics
TITLE OF INVENTION: Starch
FILE REFERENCE:
CURRENT APPLICATION NUMBER: US/10/272,291
PRIOR FILING DATE: 2002-10-17
PRIOR APPLICATION NUMBER: 60/329,525
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 8
LENGTH: 641
TYPE: PRT
ORGANISM: Zea mays
FEATURES:
OTHER INFORMATION: Starch Synthase IIA (SsIIa)
US-10-272-291-8

Query Match 58.9%; Score 2516.5; DB 14; Length 641;
Best Local Similarity 66.2%; Pred. No. 1.7e-189;
Matches 493; Conservative 54; Mismatches 93; Indels 105; Gaps 8;

56 VAAABAGKARVDDDAASAROPRARGAATYVAERDPVKTLDRAEGGAPAPAPRODAAR 115
1 MAEABAGKARVDDDAASAROPRARGAATYVAERDPVKTLDRAEGGAPAPAPRODAAR 115
116 QDAARPPSNMGTPVNGNKSTGGGATKDSGLPAPARAPHPSTONRVPVNGENKXNVASPPSIA 175
116 QDAARPPSNMGTPVNGNKSTGGGATKDSGLPAPARAPHPSTONRVPVNGENKXNVASPPSIA 175
39 -----PYGRYSATGN-----TARTAAACQNALADVEIKSVAP 75
176 PTSLAEVAPDSATISISDKAPEVVPAPKPPSSGSGNFVVSASAPRLDIDVPELKCAVY 235
76 PTSLAEVAPDSATISISDKAPEVVPAPKPPSSGSGNFVVSASAPRLDIDVPELKCAVY 235
236 KCAVIVAEAPNPKALSPAPPAVQEDLMDFKYIGFEEPEAKDGMAYADAGSFHHNNDG 294
120 -----GIAPTEVPEVQEXTMDFKXIGFDEPDEAKDSDRVGADAGSFHHNNDG 166
295 QNHSGPLAGENMNVVVAABCSBCKTGLGVAGALPKALAKRGHVMVVPYGYEAYDY 354
167 GDNDSGLAGENMNVVVAABCSBCKTGLGVAGALPKALAKRGHVMVVPYGYEAYDY 226
355 EEAADVGVKRYKKAAGDMENYFHAVIDGVDFIDAPLFRHQEDIYGSROEIMKMLIFCKA 414
227 VEAEDMGRKRYKKAAGDMENYFHAVIDGVDFIDAPLFRHQEDIYGSROEIMKMLIFCKA 286
415 ILFCKAIVEVPMHVPCCGVPRYDGNLVFIANDMTALLPYLKAAYRDHGMQYTESIMVTHIAH 474
287 IL-----GVCYGDONLVFIANDMTALLPYLKAAYRDHGMQYTESIMVTHIAH 331
475 IHNIAHQGRGVDEPTELEHEHLEHRLYDPVGEHANYFAAGLKMADQVVPVPGYLMELXTV 534
332 IHNIAHQGRGVDEPTELEHEHLEHRLYDPVGEHANYFAAGLKMADQVVPVPGYLMELXTV 391
535 MELKTVEGGMGLHDIIRONDMKTRGIYNGIDNMENPEVDVHLKSDGYTFPSIGTLDGGRQCKEA 594
392 MELKTVEGGMGLHDIIRONDMKTRGIYNGIDNMENPEVDVHLKSDGYTFPSIGTLDGGRQCKEA 451
595 ROCEBALORELGLOVRADVPLLGFIQRLDQKQVEIADAMPWISQDVOLVNLGTRHDLBSMLR 654
452 ROCEBALORELGLOVRADVPLLGFIQRLDQKQVEIADAMPWISQDVOLVNLGTRHDLBSMLR 511
655 LESMLRHEHEDHDKRWGSGSVRLARITAGADALLMPSRFPCCGLNLYMAGTVPVYHAYG 714

Db 512 LERLCHLEHREHNKRGWGFVPMARHTAGADVLNMPSPREPCGQLNQLYAAAYGVTP 571
 Qy 715 VYHVGVRDTPVPDPFNHSGLWTFDRAEAKHLIHALGCLRTYRDYKESWRLQORG 774
 Db 572 VYHVV-----AGLWTFDRAEAKHLIHALGCLRTYRDYKESWRLQORG 616
 Qy 775 MSQDSFMEHAUKYEDVYLKAKYQW 799
 Db 617 MSQDSFMEHAUKYEDVYLKAKYQW 641

RESULT 3
 US-10-389-566-797
 ; Sequence 797, Application US/10389566
 ; Publication No. US20040025202A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Monsanto Technology, LLC
 ; APPLICANT: Laurie, Cathy C
 ; TITLE OF INVENTION: Nucleic Acid Molecules Associated with Oil in Plants
 ; FILE REFERENCE: 38-77(52900)D
 ; CURRENT FILING DATE: 2003-03-31
 ; PRIOR FILING DATE: 2002-03-15
 ; PRIOR APPLICATION NUMBER: US 60/391,786
 ; PRIOR FILING DATE: 2002-06-25
 ; PRIOR APPLICATION NUMBER: US 60/392,018
 ; PRIOR FILING DATE: 2002-06-26
 ; NUMBER OF SEQ ID NOS: 2459
 ; SOFTWARE: PatentIn version 3.2
 ; SEQ ID NO 797
 ; LENGTH: 694
 ; TYPE: PR
 ; ORGANISM: Oryza sativa
 US-10-389-566-797

Query Match 55.7%; Score 2380.5; DB 16; Length 694;
 Best Local Similarity 59.2%; Pred. No. 1e-178;
 Matches 478; Conservative 79; Mismatches 129; Indels 121; Gaps 15;

Qy 1 MSSAVAS---AASFILASASPGSRRRARVAPPPH--AGAG-RLHMPMPPORTADG 54
 Db 1 MSGAIASSPAATLFLAGSSSSSPR--RRSRVSGVMHLYGTLRLH---MERGLVARDG 56
 Qy 55 GV--AARAGKCDARVDDDAASARQPARRGAATKVAERDVPKTLDRDAEGGAPAP 112
 Db 57 AVVCSASAAG---EDGVAKAK-----TKSA----- 79
 Qy 113 APRQDAARPPSMNGTVPNGENKSTGGGATKDSGLPAPAPAPHPSTQNRVPVNGENKANV 172
 Db 80 -----GSSKAVAVQGST-----AKADHVE-----DS 100
 Qy 173 ASPTSLAEVVAAPDAATISISDKAPESVYPAEKPPSSGSNFVVSASAPRLDIDSDVP 232
 Db 101 VSSPKYVPAVAKQNGEVVS---RATKSDAPVSKPK-----VDPSPASKAAD--- 146
 Qy 233 ELKGAIVTEBAPNPKALSPAPAPAVQEDLDFKTYIGFEEPEVAKDDGMAVADAGSFE 292
 Db 147 -----GNAQAVESKALDKED-----VGVABPLEAKADAGGAGAVSSAD 187
 Qy 293 HHONHDSGPLAGENVVNVVVAACSPMCKTGLGDAVAGALPVALARGERVWVVPYRG 352
 Db 188 DSEKESGFLAGPVMVNVIVASCSFPCKTGGLGDAVAGALPVALARGERVWVVPYRG 247
 Qy 353 DYBAYDVGVKRTTKAAGQDMENVYFHAVIDGVDFTADPLPRHROEDTGGSGROELNK 412
 Db 248 EYAEKADGVKRYKRVAKQDSVSYFHAFIGVDVFLFLEAPPRHRNDIYGGERPDVAK 307
 Qy 413 RNLFCRAAVEVPMHVPVCGVPGVGNLVFTANDMETALLPYLLKAYRDHGLMQYTRSI 472
 Db 308 EMILFCRAAVEVPMHVPVCGVPGVGNLVFTANDMETALLPYLLKAYRNGLMQYTRSV 367
 Qy 473 MYINHAHQGRPVDDPEPTELPHYLEHFLIYDPVGGEBANTFAAGLAKADQVAVVSPG 532

Db 368 LVHNIHQGRPVDDPEFATMDLPEHYIDHFRILYDPVGGESHNVPAAGIKADRAVATVSHG 427
 Qy 533 YLMEILTVGSGWGLDITRONDMKTRGIYNGIINNENNPEVDVHLKSDGYTNFELGLTDS 592
 Db 428 YLMEILTVGSGWGLDITRONDMKTRGIYNGIINNENNPEVDHLOSGGYTNYFFELTDT 487
 Qy 593 GKQCKEALQRELGLOVADVPILGFTIGLDQKGVETIADAMPYISQDVQVNLGTR 652
 Db 488 GKQCKEALQRELGLOVADVPILGFTIGLDQKGVETIADAMPYISQDVQVNLGTR 547
 Qy 653 HDLESMLRPEREHDHOKRGWGFVRLAHRITAGADVLNMPSPREPCGQLNQLYAAAYGT 712
 Db 548 PDLEEMLRPFESRHNDKRGWGFVQVLAHRTIADADVLNMPSPREPCGQLNQLYAAAGT 607
 Qy 713 VYVHAHVGVRDTPVPDPFNHSGLWTFDRAEAKHLIHALGCLRTYRDYKESWRLQOE 772
 Db 608 VYVHAHVGVRDTPVPDPFNHSGLWTFDRAEAKHLIHALGCLRTYRDYKESWRLQOA 667
 Qy 773 RGMQDSFMEHAUKYEDVYLKAKYQW 799
 Db 668 RGMQDSFMEHAUKYEDVYLKAKYQW 694

RESULT 4
 US-10-389-566-1213
 ; Sequence 1213, Application US/10389566
 ; Publication No. US20040025202A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Monsanto Technology, LLC
 ; APPLICANT: Laurie, Cathy C
 ; TITLE OF INVENTION: Nucleic Acid Molecules Associated with Oil in Plants
 ; FILE REFERENCE: 38-77(52900)D
 ; CURRENT FILING DATE: 2003-03-31
 ; PRIOR FILING DATE: 2002-03-15
 ; PRIOR APPLICATION NUMBER: US 60/391,786
 ; PRIOR FILING DATE: 2002-06-25
 ; PRIOR APPLICATION NUMBER: US 60/392,018
 ; PRIOR FILING DATE: 2002-06-26
 ; NUMBER OF SEQ ID NOS: 2459
 ; SOFTWARE: PatentIn version 3.2
 ; SEQ ID NO 1213
 ; LENGTH: 694
 ; TYPE: PR
 ; ORGANISM: Oryza sativa
 US-10-389-566-1213

Query Match 55.3%; Score 2365.3; DB 16; Length 694;
 Best Local Similarity 59.0%; Pred. No. 1.5e-177;
 Matches 476; Conservative 79; Mismatches 131; Indels 121; Gaps 15;

Qy 1 MSSAVAS---AASFILASASPGSRRRARVAPPPH--AGAG-RLHMPMPPORTADG 54
 Db 1 MSGAIASSPAATLFLAGSSSSSPR--RRSRVSGVMHLYGTLRLH---MERGLVARDG 56
 Qy 55 GV--AARAGKCDARVDDDAASARQPARRGAATKVAERDVPKTLDRDAEGGAPAP 112
 Db 57 AVVCSASAAG---EDGVAKAK-----TKSA----- 79
 Qy 113 APRQDAARPPSMNGTVPNGENKSTGGGATKDSGLPAPAPAPHPSTQNRVPVNGENKANV 172
 Db 80 -----GSSKAVAVQGST-----AKADHVE-----DS 100
 Qy 173 ASPTSLAEVVAAPDAATISISDKAPESVYPAEKPPSSGSNFVVSASAPRLDIDSDVP 232
 Db 101 VSSPKYVPAVAKQNGEVVS---RATKSDAPVSKPK-----VDPSPASKAAD--- 146
 Qy 233 ELKGAIVTEBAPNPKALSPAPAPAVQEDLDFKTYIGFEEPEVAKDDGMAVADAGSFE 292
 Db 147 -----GNAQAVESKALDKED-----VGVABPLEAKADAGGAGAVSSAD 187


```

Db      80 VVVVPRSHYADQDDIGWWRKYVDQDMVEVYFHSYIDGVFVFDSPFRHLDNTY 139
Qy      404 GGSROELMKRMILFCKAAVEVPMVPCGGVYVPGDNLVPIANDMHTALLPVYLKAYYRDH 463
Db      140 GGNREDILKRMVLFCKAAAEVPMVPCGGVYVPGDNLVPIANDMHTALLPVYLKAYYRDH 199
Qy      464 GLMGTYSIMVTHIAHQGRGVDEFFTELPEHYLEHFRILYDVGGEHANYFAAGLKAA 523
Db      200 GLMKTYSLVTHIAHQGRPIDDERYTDLPEHYIDLFKLYDVGGEHNFIFSAQKAA 259
Qy      524 DQVVVSPGYLMELKTVGGWGLHDIIRONDWKTREGIVNGIDNMENNEPVVHLKSDGYT 583
Db      260 DRIVTVSHGYAMEIKTSEGGWGLHGIINENDMKLRGIVNGIDTKDMNPKIDVHLKSDGYT 319
Qy      584 NFSIGTLDGKROCKEALORELGLQVADVPLLGFTGRLDGKGVETIADAMPVYSODV 643
Db      320 NYTLETLOSGRQCKKALQKELGLPVREDVPLGFTGRLDGKIDILAEALPWIYQDV 379
Qy      644 QLVMLGTGRHDLSEMLRPFEREHNDKVRGWVGSVRLAHRITAGADALLMSPRFEPCGLN 703
Db      380 QLVMLGTGRPDLEMLRPFESQHRDKVRGWVGSVYKAHRITAGADILLMSPRFEPCGLN 439
Qy      704 QLYANAYGVTPVYVHAGVGRDTPVPDPFNHSGLGWTFDRAEAKLIEALGCLRTYRDY 763
Db      440 QLYANAYGTIPVYVHAGVGRDTPVPDPFNHSGLGWTFDRAEAKLIEALGCLRTYRDY 499
Qy      764 KESMRGLQERGMDSODFSWEHAALKYEDVLLKAYYQW 799
Db      500 KQSMWGLQRRGMTDLSWMDNAAQYEEVLYAAKQW 535

```

RESULT 7

```

US-10-424-599-202586
/ Sequence 202586, Application US/10424599
/ Publication No. US20040031072A1
/ GENERAL INFORMATION:
/ APPLICANT: La Rosa Thomas J
/ APPLICANT: Kovalic David K
/ APPLICANT: Zhou Yihua
/ APPLICANT: Cao Yongwei
/ TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
/ TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
/ FILE REFERENCE: 38-21(53223)B
/ CURRENT APPLICATION NUMBER: US/10/424,599
/ CURRENT FILING DATE: 2003-04-28
/ NUMBER OF SEQ ID NOS: 285684
/ SEQ ID NO 202586
/ LENGTH: 771
/ TYPE: PRT
/ ORGANISM: Glycine max
/ FEATURE:
/ NAME/KEY: unsure
/ LOCATION: (1)...(771)
/ OTHER INFORMATION: unsure at all xaa locations
/ FEATURE:
/ OTHER INFORMATION: Clone ID: PAT_MRT3847_24960C.1.pcp
US-10-424-599-202586

```

```

Query Match      50.5% Score 2161.5; DB 12; Length 771;
Best Local Similarity 74.8%; Pred. No. 2,2e-161;
Matches 386; Conservative 64; Mismatches 65; Indels 1; Gaps 1;

```

```

Qy      284 VADAGSEFHQNDHSGPLAGENTWNVVVAACSPWCKTGGIGDVAGALPKALARGHR 343
Db      257 VANEDDANE-SKGENPPELAGANVNVVILVAACAPFKVKGIGDVAGSLPKALARGHR 315
Qy      344 VVVVPRSHYADQDDIGWWRKYVDQDMVEVYFHSYIDGVFVFDSPFRHLDNTY 403
Db      316 VVVVPRSHYADQDDIGWWRKYVDQDMVEVYFHSYIDGVFVFDSPFRHLDNTY 375
Qy      404 GGSROELMKRMILFCKAAVEVPMVPCGGVYVPGDNLVPIANDMHTALLPVYLKAYYRDH 463

```

```

Db      376 GGNREDILKRMVLFCKAAAEVPMVPCGGVYVPGDNLVPIANDMHTALLPVYLKAYYRDH 435
Qy      464 GLMGTYSIMVTHIAHQGRGVDEFFTELPEHYLEHFRILYDVGGEHANYFAAGLKAA 523
Db      436 GLMKTYSLVTHIAHQGRPIDDERYTDLPEHYIDLFKLYDVGGEHNFIFSAQKAA 495
Qy      524 DQVVVSPGYLMELKTVGGWGLHDIIRONDWKTREGIVNGIDNMENNEPVVHLKSDGYT 583
Db      496 DRIVTVSHGYAMEIKTSEGGWGLHGIINENDMKLRGIVNGIDTKDMNPKIDVHLKSDGYT 555
Qy      584 NFSIGTLDGKROCKEALORELGLQVADVPLLGFTGRLDGKGVETIADAMPVYSODV 643
Db      556 NYTLETLOSGRQCKKALQKELGLPVREDVPLGFTGRLDGKIDILAEALPWIYQDV 615
Qy      644 QLVMLGTGRHDLSEMLRPFEREHNDKVRGWVGSVRLAHRITAGADALLMSPRFEPCGLN 703
Db      616 QLVMLGTGRPDLEMLRPFESQHRDKVRGWVGSVYKAHRITAGADILLMSPRFEPCGLN 675
Qy      704 QLYANAYGVTPVYVHAGVGRDTPVPDPFNHSGLGWTFDRAEAKLIEALGCLRTYRDY 763
Db      676 QLYANAYGTIPVYVHAGVGRDTPVPDPFNHSGLGWTFDRAEAKLIEALGCLRTYRDY 735
Qy      764 KESMRGLQERGMDSODFSWEHAALKYEDVLLKAYYQW 799
Db      736 KQSMWGLQRRGMTDLSWMDNAAQYEEVLYAAKQW 771

```

RESULT 8

```

US-10-284-668-8
/ Sequence 8, Application US/10284668
/ Publication No. US20030106100A1
/ GENERAL INFORMATION:
/ APPLICANT: Kossmann, Jens
/ APPLICANT: Springer, Franziska
/ APPLICANT: Abel, Gernot
/ TITLE OF INVENTION: DNA MOLECULES THAT CODE FOR ENZYMES
/ INVOLVED IN STARCH SYNTHESIS VECTORS BACTERIA TRANSGENIC
/ PLANT CELLS AND PLANTS CONTAINING SAID MOLECULES
/ NUMBER OF SEQUENCES: 17
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: FISH & NEAVE
/ STREET: 1251 Avenue of the Americas
/ CITY: New York
/ STATE: New York
/ COUNTRY: USA
/ ZIP: 10020
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patentin Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/10/284,668
/ FILING DATE: 29-Oct-2002
/ CLASSIFICATION: <Unknown>
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/836,567
/ FILING DATE: 24-JUL-1997
/ APPLICATION NUMBER: PCT/EP95/04415
/ FILING DATE: 09-NOV-1995
/ APPLICATION NUMBER: DE P 44 41 408.0
/ FILING DATE: 10-NOV-1994
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Haley Jr., James F.
/ REGISTRATION NUMBER: 27,794
/ REFERENCE/DOCKET NUMBER: Agrevo-4
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 212-596-9000
/ TELEFAX: 212-596-9090
/ INFORMATION FOR SEQ ID NO: 8:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 767 amino acids
/ TYPE: amino acid

```

TOPOLGY: linear
MOLECULE TYPE: Protein
SEQUENCE DESCRIPTION: SEQ ID NO: 8
US-10-284-668-8

Query Match 50.3%; Score 2150.5; DB 14; Length 767;
Best Local Similarity 54.3%; Pred. No. 1.6e-160;
Matches 426; Conservative 104; Mismatches 188; Indels 67; Gaps 10;

```

34 HAGAGRLHWPWPQRTKARDGVAAAPAAAGKDAVDDAASAOAPRARRGAATKAAER 93
31 HGSSEQWRIKRYKATGNSGEAASADESNDALQYTIKSKKVALMOQDLLOQIAER 89
94 DFKTLDRDAA-----EGGAPA-----PPAPQDAAPPSPMNGTPVNGENKSTGGGA 141
90 KVVSGIKSLANAKGTVDGSGSLSDVDIPVDKDVVTVPTAAFTITVDKNT----- 144
142 TKDSGLPAPAPRHSTONRYPVNGENKANYA---SPPTIAEVVAPDSAAITISDKAP 198
145 -----PPAISQDFVESKREIKRDLADERRAPLSRSSTLA-SSQISSTVSSKRT 191
199 ESVPAPKPPSPSGSNFVVASAPRLDID-----SDVEPELKGAIVYEAPNPKALSPPA 254
192 LN-VPETPKSQOETLIDVNSKSLVDVPKKGISYVPSLRKSSASHVQRENLEGSS 250
255 APAVGEDLMDPKYIIGFEFVEAKDDGNAVDADGSEFHQNDSGFLAGEINMNVVVA 314
251 AEANEET-----EDPVNT-----DEKPPPLAGTVMMLILVA 282
315 AECSPWCKTGGIGLVAGALPKALAKRGHVVVVPRYGDYEAAYDVGRKYVYAAQDME 374
283 SECAPMSKXGGLGDVAGALPKALARGHRVWVAPRYDNYPEPDGSKRIYKVDGQVE 342
375 VNYFAAYIDGVDFVTDAPLFRHRCEDTYGSSROEIMKMLIFCKAAVEPMVPCGGVP 434
343 VTFPAFTIDGVDFIDSHMFRHGNNTYGSNRVDILKRWVDFCKALIEVPMVPCGGVC 402
435 YDGNLVFIANDMWTALLPVYLKAYRDHGLMOYTRSIMYIHNTAHQGRGPVDFPTEL 494
403 YDGNLVFIANDMWTALLPVYLKAYRDHGNIMNYTRSVLVHNTAHQGRGPVDFSVYDL 462
495 PEHYLHFRILYDPVGEHANYPAAGLKADQVNVVSGYVWELKTVGCGMGLDIIKOND 554
463 PPHYDPPKLTIDPVGEHFNTPAAGLKTADRYVVSIGYSWELKTSGCGMGLDIIKOND 522
555 WKTRGIVNGIDNMENNPEDVHLKSDGYTNFSLGTLDSGRCKEALQRELGLQVADVP 614
523 WTLQGIIVNGIDTKENNPEDVHLQSDGYMNTSLDTLQTKRQCKEALQRELGLPVSDVP 582
615 ILGFTGRLDGGKGVETIADAMPWIVSODVOLVMTGTGRHDESLRHFEEHEDKRYGV 674
583 ILGFTGRLDPPQGVULIABASAMMGQVOLVMTGTGRHDESLRHFEEHEDKRYGV 642
675 GFSVALHRTITAGADALIMPSPFPCGILNOLYAMAYGTVVVAHVGVRDTPPPPPEN 734
643 GFSVKTSHRITAGADILIMPSPFPCGILNOLYAKKYGITIPVVAHVGGLRDTVPFPFPE 702
735 SGLGWTFRBAEAKLIEALGHCLRTYRDYKESWGLQERGSODPSWEHAATKYEDVLK 794
703 SGLGWTFRBAEAKLIEALGHCLRTYRDYKESWGLQERGSODPSWEHAATKYEDVLK 762
795 AKYQW 799
763 AKYQW 767

```

RESULT 9
US-10-272-291-7
Sequence 7, Application US/10272291
Publication No. US20030150023A1
GENERAL INFORMATION:
APPLICANT: Exseed Genetics
TITLE OF INVENTION: Starch

FILE REFERENCE:
CURRENT APPLICATION NUMBER: US/10/272,291
CURRENT FILING DATE: 2002-10-17
PRIOR APPLICATION NUMBER: 60/329,525
PRIOR FILING DATE: 2001-10-01
NUMBER OF SEQ ID NOS: 8
SOFTWARE: Patent In Ver. 2.1
SEQ ID NO 7
LENGTH: 477
TYPE: PRT
ORGANISM: Zea mays
FEATURE:
OTHER INFORMATION: Starch Synthase IIb-2 (N-terminally truncated)
US-10-272-291-7

Query Match 48.4%; Score 2069.5; DB 14; Length 477;
Best Local Similarity 76.0%; Pred. No. 2e-154;
Matches 374; Conservative 47; Mismatches 56; Indels 15; Gaps 1;

```

308 MNTVVAECSPWCKTGGIGLVAGALPKALARGHRVWVPRYGDYEAAYDVGRKYK 367
1 MNTVVAECSPWCKTGGIGLVAGALPKALARGHRVWVPRYGDYEAAYDVGRKYK 60
368 AAGQDMVNYFAAYIDGVDFVTDAPLFRHRCEDTYGSSROEIMKMLIFCKAAVEPM 427
61 VAGQDSVITYFHSYIDGVDFVTDAPLFRHRCEDTYGSSROEIMKMLIFCKAAVEPM 120
428 VPQGVDFYDGNVFIANDMWTALLPVYLKAYRDHGLMOYTRSIMYIHNTAHQGR 487
121 APQGVYDGNVFIANDMWTALLPVYLKAYRDHGLMOYTRSIMYIHNTAHQGR 180
488 EFPTELPEHYLHFRILYDPVGEHANYPAAGLKADQVNVVSGYVWELKTVGCGM 547
181 DFVNFDPPEHYLHFRILYDPVGEHANYPAAGLKADQVNVVSGYVWELKTVGCGM 240
548 DITQNDWKTRGIVNGIDNMENNPEDVHLKSDGYTNFSLGTLDSGRCKEALQREL 607
241 DITQNDWKTRGIVNGIDNMENNPEDVHLKSDGYTNFSLGTLDSGRCKEALQREL 289
608 QVRAVDPLTGFIRLDGGKGVETIADAMPWIVSODVOLVMTGTGRHDESLRHFEE 667
290 -----DVPILGFTGRLDGGKGVETIADAMPWIVSODVOLVMTGTGRHDESLR 345
668 DKVAGWGSVVALHRTITAGADALIMPSPFPCGILNOLYAMAYGTVVVAHVGVR 727
346 DKVAGWGSVVALHRTITAGADALIMPSPFPCGILNOLYAMAYGTVVVAHVGVR 405
728 PFDFPNHSGLWTFDRAEAKLIEALGHCLRTYRDYKESWGLQERGSODPSWEHA 787
406 PFDFPNHSGLWTFDRAEAKLIEALGHCLRTYRDYKESWGLQERGSODPSWEHA 465
788 YEDVLAKYQW 799
466 YEDVLAKYQW 477

```

RESULT 10
US-10-044-543-6
Sequence 6, Application US/10044543
Publication No. US20030135893A1
GENERAL INFORMATION:
APPLICANT: Singletary, George
TITLE OF INVENTION: No. US20030135893A1 Starch Synthase Polynucleotides
FILE REFERENCE: 1144D
CURRENT APPLICATION NUMBER: US/10/044,543
CURRENT FILING DATE: 2002-01-11
PRIOR APPLICATION NUMBER: 09/388,743
PRIOR FILING DATE: 1999-09-02
NUMBER OF SEQ ID NOS: 28
SOFTWARE: FastSeq for Windows Version 3.0

SEQ ID NO 6
LENGTH: 690
TYPE: PRT
ORGANISM: Curcuma zedoaria
US-10-044-543-6

Query Match 48.2%; Score 2063; DB 14; Length 690;
Best Local Similarity 56.0%; Pred. No. 1,1e-153;
Matches 404; Conservative 80; Mismatches 166; Indels 72; Gaps 9;

109 PAPPAP-----RQDAAP-----PSMNGTPVNGENKSTGGGATDQSGT-----DAP 150
10 PAPPAPASGRLHGGARPLHSPICMANPLTSPFMAGLSPEVKKSGXITLKHIDHGS 69
151 ARAP-----HSTQKRVVNGENKRVASPTSTAEVVPDPSATISISPKAESVVP 203
70 ARTVRFINALYHGGADLVPIHNRGKSSGAVGRSNIND-IOEDSNQDVIDADDSVAQTWE 128
204 AEKPPSSGSNFVVSASAPRLDIDSDVEPLKKG-----AVIVEAPNPKALSPPAAPA 257
129 QSKVLEMOENLLQOITIEKR-NSESETESYVKKDEMLGYAAYVQTSNNQGEAPP----- 183
258 VQEDJMPKXKIGEESEVEAKDDGKAVADAGSFEHHQNHDSGPLAGENVMVNVVVAAC 317
184 -----EKG-----NLSPLLAGPVVNMNIIIVAAEC 208
318 SPWCKTGGLDVGALPKALAKGHRVWVVPYGDYEAVDVYAKYKAAAGDMEVNY 377
209 APWCKTGGLDVGALPKALAKGHRVWVVPYGDYEAVDVYAKYKAAAGDMEVNY 268
378 FHAYIDVDVVFIDAPFRHROEDYGGSGOELMKEMILFCRAVAVPVPHVCGGVPCXD 437
269 YHYIDVDVVFIDSPFRHNDIYGSNVDILKRVVLCRAAVPVPHVCGGVPCXD 328
438 GNLVFIANDMHTALLPYLKAYYRDHGLMOYTRSMVINIHAQGRGPVDEPTELPERH 497
329 GNLVFIANDMHTALLPYLKAYYRDHGLMOYTRSMVINIHAQGRGPVDEPTELPERH 388
498 YLHFRILYDVPVGGHAYVPAAGLKMADVVVSPGYLMEKTVGEGMGGLHDIIRONDMT 557
389 HIDEFRILYDVPVGGHAYVPAAGLKMADVVVSPGYLMEKTVGEGMGGLHDIIRONDMT 448
558 RGIYNGIDNMENPEVDVHLKSDGYTNFSLGTDGSKRQCKEALQRELGLOVRAADVPLG 617
449 HGIYNGIDNHSNPKFAHLSNDGYTNFLETLEMGACQCKALQRELGLOVRAADVPLG 508
618 FIEGLDQKGVETIADAMPVIVSODVQVNLGTGRHDLBSMLPHEFERHDDKVRGVGVS 677
509 FIEGLDQKGVETIADAMPVIVSODVQVNLGTGRHDLBSMLPHEFERHDDKVRGVGVS 568
678 VRLAARITAGADALLMPSREFPCGLNQLYAMAYGVVVAAGVADTVPPDPFNHSGT 737
569 VKMAHRTIAGADALLMPSREFPCGLNQLYAMAYGVVVAAGVADTVPPDPFNHSGT 628
738 GWTEDRAEAHNLIALHCLRTYADYKESNRGIOERMSODPSMEHAALYEDVILKAY 797
629 GWTEDRAEAHNLIALHCLRTYADYKESNRGIOERMSODPSMEHAALYEDVILKAY 688
798 QM 799
689 QM 690

RESULT 11

US-10-284-668-6

Sequence 6, Application US/10284668

Publication No. US20030106100A1

GENERAL INFORMATION:

Applicant: Kossman, Jens

Springer, Franziska

Abel, Gernot

TITLE OF INVENTION: DNA MOLECULES THAT CODE FOR ENZYMES

INVOLVED IN STARCH SYNTHESIS VECTORS BACTERIA TRANSGENIC

PLANT CELLS AND PLANTS CONTAINING SAID MOLECULES

NUMBER OF SEQUENCES: 17

CORRESPONDENCE ADDRESS:

ADDRESSEE: FISH & NEAVE

STREET: 1251 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10020

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/284,668

FILING DATE: 29-Oct-2002

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/836,567

FILING DATE: 24-JUL-1997

APPLICATION NUMBER: PCT/EP95/04415

FILING DATE: 09-NOV-1995

APPLICATION NUMBER: DE P 44 41 408.0

FILING DATE: 10-NOV-1994

ATTORNEY/AGENT INFORMATION:

NAME: Haley Jr., James F.

REGISTRATION NUMBER: 27,794

REFERENCE/DOCKET NUMBER: Agrevo-4

TELECOMMUNICATION INFORMATION:

TELEPHONE: 212-596-9000

TELEFAX: 212-596-9090

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:

LENGTH: 558 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 6:

US-10-284-668-6

Query Match 48.2%; Score 2059; DB 14; Length 558;
Best Local Similarity 73.7%; Pred. No. 1,7e-153;
Matches 368; Conservative 62; Mismatches 69; Indels 0; Gaps 0;

301 PLAGENTMNVVVAACSPFCKTGGLGVAGALPKALAKGHRVWVVPYGDYEAVDV 360
60 PLAGENTMNVVVAACSPFCKTGGLGVAGALPKALAKGHRVWVVPYGDYEAVDV 119
361 GVRKTYKAGQDMEVNYFHAVIDGVDFVTDAPFRHROEDYGGSGOELMKEMILFCXA 420
120 GVRKTYKAGQDMEVNYFHAVIDGVDFVTDAPFRHROEDYGGSGOELMKEMILFCXA 179
421 AVEVPMVPCGGVYVGGNLVFIANDMHTALLPYLKAYYRDHGLMOYTRSMVINIHA 480
180 AVEVPMVPCGGVYVGGNLVFIANDMHTALLPYLKAYYRDHGLMOYTRSMVINIHA 239
481 QGRGPVDEPFTLPEHYLHFRILYDVPVGGHAYVPAAGLKMADVVVSPGYLMEKTV 540
240 QGRGPVDEPFTLPEHYLHFRILYDVPVGGHAYVPAAGLKMADVVVSPGYLMEKTV 299
541 EGGWGLHDIIRONDMTKGIYNGIDNMENPEVDVHLKSDGYTNFSLGTDGSKRQCKEA 600
300 EGGWGLHDIIRONDMTKGIYNGIDNMENPEVDVHLKSDGYTNFSLGTDGSKRQCKEA 359
601 LQRELGLOVRAADVPLIGFGRLDQKGVETIADAMPVIVSODVQVNLGTGRHDLBSML 660
360 LQRELGLOVRAADVPLIGFGRLDQKGVETIADAMPVIVSODVQVNLGTGRHDLBSML 419
661 HFEREHDDKVRGVGVSRLAHRITAGADALLMPSREFPCGLNQLYAMAYGVVVAAGV 720
420 QFEGQNHDKIRGVGVSRLAHRITAGADALLMPSREFPCGLNQLYAMAYGVVVAAGV 479

QY 721 GVRDTPVPDPFNNHSGIWMTPDRAEAKHLEALCHCLRTYRDYKESNRGLQERGSODPS 780
 DB 480 GLRDTVPDPFNNHSGIWMTPDRAEAKHLEALCHCLRTYRDYKESNRGLQERGSODPS 539
 QY 781 MEHAKEVEDYLLAKYQW 799
 DB 540 WDNAQNYEVLIAKQW 558

RESULT 12

US-10-425-114-38552
 / Sequence 38552, Application US/10425114
 / Publication No. US20040034888A1
 / GENERAL INFORMATION:
 / APPLICANT: Liu, Jingsong
 / APPLICANT: Zhou, Yinhua
 / APPLICANT: Kovalic, David K.
 / APPLICANT: Screen, Steven E.
 / APPLICANT: Tabaska, Jack E.
 / APPLICANT: Cao, Yongwei
 / TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
 / TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
 / FILE REFERENCE: 38-21(5313)B
 / CURRENT APPLICATION NUMBER: US/10/425,114
 / CURRENT FILING DATE: 2003-04-28
 / NUMBER OF SEQ ID NOS: 73128
 / SEQ ID NO 38552
 / LENGTH: 440
 / TYPE: PRT
 / ORGANISM: Zea mays
 / FEATURE:
 / OTHER INFORMATION: Clone ID: 700100789_F11.pbp
 US-10-425-114-38552

Query Match 45.2%; Score 1933; DB 12; Length 440;
 Best Local Similarity 79.1%; Pred. No. 1e-143;
 Matches 348; Conservative 40; Mismatches 52; Indels 0; Gaps 0;
 QY 360 VGVKRYKXAGQDMENVYFHAIIYDGVDFIADAPLFRHROEDIGSGROEIMKMLIFCK 419
 DB 1 LGVRKRYKXAGQDMENVYFHAIIYDGVDFIADAPLFRHROEDIGSGROEIMKMLIFCK 60
 QY 420 AAVEVPMWYPCGGVYGGNLYFIANDWHTALLPYLKAYRBDGLMOTRSIMVHNIA 479
 DB 61 AAVEVPMWYPCGGVYGGNLYFIANDWHTALLPYLKAYRBDGLMOTRSIMVHNIA 120
 QY 480 HGGRGVDFEFPTEPEHYLEHFRLYYDVGGEHANYFAAGLKMADQVAVVSPGLWELKT 539
 DB 121 HGGRGVDFEFPTEPEHYLEHFRLYYDVGGEHANYFAAGLKMADQVAVVSPGLWELKT 180
 QY 540 VGGGNGHDIIRONDMKRGIVNGIDNMENRPEVDVHLKSDQYNSFSLGTLDSKQCKE 559
 DB 181 VGGGNGHDIIRONDMKRGIVNGIDNMENRPEVDVHLKSDQYNSFSLGTLDSKQCKE 240
 QY 600 ALQRELGQVADVLEFGLRDLQKGEIITADAMPVIVSODVQVLMGTGRHDESM 659
 DB 241 ALQRELGQVADVLEFGLRDLQKGEIITADAMPVIVSODVQVLMGTGRHDESM 300
 QY 660 RHREHHDHKGWGFVRLAHRITAGDALIMSPREPCGLNOLVAMVGTVPVYHAY 719
 DB 301 RHREHHDHKGWGFVRLAHRITAGDALIMSPREPCGLNOLVAMVGTVPVYHAY 360
 QY 720 GGVADTVPPDPFNNHSGIWMTPDRAEAKHLEALCHCLRTYRDYKESNRGLQERGSODF 779
 DB 361 GGVADTVPPDPFNNHSGIWMTPDRAEAKHLEALCHCLRTYRDYKESNRGLQERGSODF 420
 QY 780 MEHAKEVEDYLLAKYQW 799
 DB 421 MEHAKEVEDYLLAKYQW 440

RESULT 13
 US-10-425-114-58577

/ Sequence 58577, Application US/10425114
 / Publication No. US20040034888A1
 / GENERAL INFORMATION:
 / APPLICANT: Liu, Jingsong
 / APPLICANT: Zhou, Yinhua
 / APPLICANT: Kovalic, David K.
 / APPLICANT: Screen, Steven E.
 / APPLICANT: Tabaska, Jack E.
 / APPLICANT: Cao, Yongwei
 / TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
 / TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
 / FILE REFERENCE: 38-21(5313)B
 / CURRENT APPLICATION NUMBER: US/10/425,114
 / CURRENT FILING DATE: 2003-04-28
 / NUMBER OF SEQ ID NOS: 73128
 / SEQ ID NO 58577
 / LENGTH: 341
 / TYPE: PRT
 / ORGANISM: Zea mays
 / FEATURE:
 / OTHER INFORMATION: Clone ID: UC-ZMFLB73257H05_F11.pbp
 US-10-425-114-58577

Query Match 32.1%; Score 1374; DB 12; Length 341;
 Best Local Similarity 69.8%; Pred. No. 8.4e-100;
 Matches 238; Conservative 51; Mismatches 52; Indels 0; Gaps 0;
 QY 459 YTRDGLMOTRSIMVYHNTAHQGRGVDFEFPTEPEHYLEHFRLYDVGGEHANYFPA 518
 DB 1 YTRDGLMOTRSIMVYHNTAHQGRGVDFEFPTEPEHYLEHFRLYDVGGEHANYFPA 60
 QY 519 GLKADQVAVVSPGLWELKTVEGGGLDIIIRONDMKRGIVNGIDNMENRPEVDVHLK 578
 DB 61 GLKADQVAVVSPGLWELKTVEGGGLDIIIRONDMKRGIVNGIDNMENRPEVDVHLK 120
 QY 579 SDGTNFSGLTDSGRCKEALQRELGQVADVLEFGLRDLQKGEIITADAMPV 638
 DB 121 SDGTNFSGLTDSGRCKEALQRELGQVADVLEFGLRDLQKGEIITADAMPV 180
 QY 639 VSQDVQVLMGTGRHDESMRHREHHDHKGWGFVRLAHRITAGDALIMSPRE 698
 DB 181 VSQDVQVLMGTGRHDESMRHREHHDHKGWGFVRLAHRITAGDALIMSPRE 240
 QY 759 TYRDKESNRGLQERGSODFSEHAKEVEDYLLAKYQW 799
 DB 301 TYRDKESNRGLQERGSODFSEHAKEVEDYLLAKYQW 341

RESULT 14

US-10-284-668-10
 / Sequence 10, Application US/10284668
 / Publication No. US20030106100A1
 / GENERAL INFORMATION:
 / APPLICANT: Kossman, Jens
 / APPLICANT: Springer, Franziska
 / APPLICANT: Abel, Gernot
 / TITLE OF INVENTION: DNA MOLECULES THAT CODE FOR ENZYMES
 / INVOLVED IN STARCH SYNTHESIS VECTORS BACTERIA TRANSGENIC
 / PLANT CELLS AND PLANTS CONTAINING SAID MOLECULES
 / NUMBER OF SEQUENCES: 17
 / CORRESPONDENCE ADDRESS:
 / ADDRESS: FISH & NEAVE
 / STREET: 1251 Avenue of the Americas
 / CITY: New York
 / STATE: New York
 / COUNTRY: USA
 / ZIP: 10020
 / COMPUTER READABLE FORM:
 / MEDIUM TYPE: floppy disk

Mon Mar 22 09:26:54 2004

us-10-018-418-4.rapp

Page 10

```

QY 480 HOOKGVDPEPFFPELEBENTL-----EHPFLYPOGSEBANYFAAGLXKADOVVSP 513
Dz 233 HOGVERASTYFDLGLPEWYKALIEWYFEMMARHLDJGEAVNPLKAAVYADRIYVSG 292
QY 532 GYIMELKTYEGWGLHDITRONDCKTRGLVNGIDNMENPEVDYHLKSDGYTNSLCTLD 551
Dz 293 GYSEKVEYTTAGGGGLNELLSRKSXYLVNGVINDINDNMPTTDKCLPH---HYSVDL- 3475
QY 592 SGKROCKEALOREJGLQVADAVYLLFGFIRLDOGQVEHIIADMBWITVSOVDQVLMJTG 651
Dz 348 SGKXKCAEIOKEJGLPVREDVPLIGFIRLDYOKGIDILKQALPELRBEDVQVLMJSG 407
QY 652 RHDLSEMLYFEEBHHDKYRGWYGFSEVRLAHRTTGAADALMPSRFEBCJNOLYAAWG 711
Dz 408 DPEEGMMKRTSESSYDKDFRGWYGFSEVPSHLLTIGCDILMPSRFEBCJNOLYAAWG 467
QY 712 TVPVYAAVGVADTVPEPDBF--NHSJGMTFDBRAEAKHLEALGHCLRTYRDYKESMR 768
Dz 468 TVPVYHGTGILARTVETFPNFFGAKGEBEGMAFSLVDYKMLMALRTAMSTFBEHKPSWE 527
QY 769 GLOERKMSODFSEWEHA 784
Dz 528 GLMGRGTTKXHTWDHA 543

```

Search completed: March 17, 2004, 19:37:08
Job time : 47 secs